

# Curriculum Vitae of Mercouri G. Kanatzidis

Department of Chemistry, Northwestern University, Evanston, IL 60208 Phone 847-467-1541; Fax 847-491-5937; Website: <a href="http://chemgroups.northwestern.edu/kanatzidis/">http://chemgroups.northwestern.edu/kanatzidis/</a> Senior Scientist, Materials Science Division, Argonne National Laboratory

Birth Date: 1957; Citizenship: US

**EXPERIENCE** 8/06-Present: Professor of Chemistry, Northwestern University and Senior Scientist,

Argonne National Laboratory, Materials Science Division, Argonne, IL

7/93-8/06: Professor of Chemistry, Michigan State University 7/91-6/93: Associate Professor, Michigan State University 7/87-6/91: Assistant Professor, Michigan State University

**EDUCATION** Postdoctoral Fellow, 1987, Northwestern University

Postdoctoral Associate, 1985, University of Michigan Ph.D. Inorganic Chemistry, 1984, University of Iowa

B.S. Chemistry, November 1979, Aristotle University of Thessaloniki

### **AWARDS**

- 1. Centenary Prize, 2023, the Royal Chemical Society
- 2. Elected to the American Academy of Arts and Sciences, 2023
- 3. New mineral *kanatzidisite* named by the International mineralogical Society 2023
- 4. Global Energy Prize, 2022 (Declined)
- 5. Clarivate Highly Cited Researcher since 2015 (in three different disciplines: chemistry, physics, and materials science), 2023
- 6. Highly Cited Researcher, Clarivate Analytics, 2019-2023 (in all three fields: Chemistry, Physics, Materials Science)
- 7. DOE Ten at Ten Award. In the Category Scientific Ideas Awards For the first demonstration of all-solid-state solar cells using halide perovskite materials, 2019
- 8. Chemical Pioneer Award, American Institute of Chemists, 2018
- 9. Honorary Doctorate Degree, University of Crete, 2017
- 10. Hershel and Hilda Rich Visiting Professorship, Technion Israel Institute of Technology, 2017
- 11. ACS Award in Inorganic Chemistry, 2016
- 12. American Physical Society 2016 James C. McGroddy Prize for New Materials
- 13. APS Fellow, 2016
- 14. Samson Prime Minister's Prize for Innovation in Alternative Fuels for Transportation, 2016
- 15. Royal Chemical Society DeGennes Prize 2015
- 16. Elected Fellow of the Royal Chemical Society 2015
- 17. ENI Award for the "Renewable Energy Prize" category, 2015
- 18. Wilhelm Manchot Research Professorship, 2015
- 19. Einstein Professor, Chinese Academy of Sciences, 2014

- 20. MRS Medal 2014
- 21. International Thermoelectric Society Outstanding Achievement Award 2014
- 22. Cheetham Lecturer Award, the University of California Santa Barbara, 2013
- 23. AAAS Fellow, American Association for the Advancement of Science, 2012
- 24. MRS Fellow, Materials Research Society, 2010
- 25. Charles E. and Emma H. Morrison Professor, Northwestern University, 2006
- 26. Alexander von Humboldt Prize, 2003
- 27. Morley Medal, American Chemical Society, Cleveland Section, 2003
- 28. John Simon Guggenheim Foundation Fellow, 2002
- 29. University Distinguished Professor MSU, 2001
- 30. Sigma Xi 2000 Senior Meritorious Faculty Award
- 31. Michigan State University Distinguished Faculty Award, 1998
- 32. Camille and Henry Dreyfus Teacher Scholar, 1993-1998
- 33. Distinguished Mentor Award, Michigan State University, 1994
- 34. Outstanding Mentor Award, Michigan State University, 1994
- 35. Beckman Young Investigator, 1992-1994
- 36. Alfred P. Sloan Fellow, 1991-1993
- 37. ACS Inorganic Chemistry Division Award: EXXON Faculty Fellowship in Solid State Chemistry, 1990
- 38. Presidential Young Investigator Award: National Science Foundation, 1989-1994

Publications >1,600, citations >177,000, H index 191. Patents: 60 Over 600 invited presentations. Over sixty plenary lectures.

### PROFESSIONAL SERVICE AND RECOGNITION

- Selection Committee for the 2023 Bodossaki Foundation Distinguished Young Scientist Award in Chemistry
- Editorial Advisory Board *Inorganic Chemistry*, 1994-1998; 2015-
- Editorial Advisory Board Chemistry of Materials, 1993-2000; 2015-
- Editorial Advisory Board Materials Horizons, 2015-
- Editorial Advisory Board Chem, 2016-
- Editorial Advisory Board Journal of Materials Chem A, 2016-
- Editorial Advisory Board Joule, 2017-
- Editorial Advisory Board ACS Energy Letter, 2016-
- Editorial Advisory Board ACS Applied Materials and Interfaces, 2018-
- Editorial Advisory Board Journal of Materials Chemistry A, 2013-
- Editorial Advisory Board Journal of Alloys and Compounds 1995-2015
- Editorial Advisory Board Zeitschrift für anorganische und allgemeine Chemie, 2000-
- Editorial Advisory Board Bulletin Korean Chemical Society 1998-
- Editor-in-Chief: Journal of Solid State Chemistry 1997-
- Editorial Advisory Board Energy and Environmental Science 2012-
- Reviewer, Manuscripts: Journal of American Chemical Society, Physical Review B., Physical Review Letters, Proceedings of the National Academy of Sciences, Inorganic Chemistry, Chemical Communications, Dalton Transactions, Accounts of Chemical Research, Chemistry of Materials, Angewandte Chemie, Nature, Nature Materials, Nature Chemistry, Nature Communications, Nature Energy, Science, ACS Nano, Chemistry – A European Journal, Chemical Science, et al.
- Reviewer Funding Agencies: National Science Foundation, Department of Energy, Cottrell Foundation
- Chairman Solid State Chemistry Subdivision, American Chemical Society 1998-1999

- Member of Awards Committee ACS Inorganic Division Award ExxonMobil Faculty Fellow in Solid State Chemistry 2005-2007
- DOE Panel to Review the Materials Chemistry and Physics Program of Ames Lab, Iowa State University, June 2006
- Organizer of Gordon Research Conference in Solid State Chemistry, 2008
- American Chemical Society, Div. of Chemical Education, Examinations Institute Cmte
- DOE and NSF Panel Reviewer 2008-2013
- Member of Awards Committee: ACS Award for Distinguished Service in Inorganic Chemistry, 2010-2012
- Special advisory member of the Ho-Am Prize Ho-Am Foundation, Korea
- NSF Review Panel member for Division of Materials Research, March 2015
- Member of Awards Committee for APS James C. McGroddy Prize for New Materials, 2017
- AAAS Chemistry Section Steering Committee, 2017
- AAAS Electorate Nominating Committee, 2017-2019

#### SOCIETY MEMBERSHIPS

American Association for the Advancement of Science, American Association for Crystal Growth, American Chemical Society, American Crystallographic Association, American Physical Society, Materials Research Society, Energy Harvesting Society, Royal Chemical Society, and Sigma Xi.

# **SYNERGISITC ACTIVITIES (selected)**

- Contributor/participant to Report for the US Department of Energy, Office of Nuclear Energy "Innovative Separations R&D Needs for Advanced Fuel Cycles Workshop" August 30— September 1, 2021
- Guest Editor for *Inorganic Chemistry* Forum Issue: "Bismuth The Magic Element," 2020.
- Co-organizer. APS Physics Next Workshop on Materials Design and Discovery, Long Island, NY (https://journals.aps.org/physics-next/2017/materials-design-and-discovery) May 15-17, 2017.
- Panelist. BES workshop: Basic Research Needs for Synthesis Science for Energy Relevant
  Technology in the Washington DC area. The goal of this workshop was to identify basic research
  needs and opportunities in synthesis science with a focus on new, emerging and scientifically
  challenging areas that have the potential to have significant impact on science and energy relevant
  technologies, May 2016.
- Panelist. Basic Research Needs on Quantum Materials for Energy Relevant Technology workshop held in Washington DC and contributed in the preparation of the final document. (https://science.energy.gov/~/media/bes/pdf/reports/2016/BRNQM\_rpt\_Final\_12-09-2016.pdf), February 2016.
- Organizer: ACS-PHYS Division: Symposium organizer "Heat to Energy Conversion" ACS National Meeting, Boston, MA August 2015.
- Co-organizer. International Symposium on Advanced Nanoporous and Nanostructured Materials, Heraklion, Crete, September 3-4, 2014.
- Co-organizer. DOE-BES Materials Chemistry PI meeting, Annapolis, MD, July 2012.
- Co-organizer. Symposium on Emerging Developments in Nanomaterials for Energy Applications Inorganic Chemistry Division, ACS National Meeting, San Diego, CA, April 2012.
- Organizer: Symposium in ACS National Meetings, INOR: "Emerging Developments in Nanomaterials for Energy Applications", ACS National Meeting, San Diego, CA, March 2012.
- 9th European Conference on Thermoelectrics in Thessaloniki Greece, September 28-30, 2012.
- Co-organizer. Workshop on Emerging Opportunities in Nanostructured Semiconductors, Evanston, IL, June 2011.

- Organizer: Symposium in ACS National Meetings, INOR: Synthesis & Applications of Intermetallic Compounds, Washington, D.C., August 2009.
- Organizer: Symposium in Honor of Professor Tobin Marks ACS Award in Distinguished Service Inorganic Chemistry. ACS National Meeting in New Orleans 2008.
- Organizer Gordon Research Conference, Solid State Chemistry, New London, NH, July 2008.
- Co-organizer: Materials Research Society: Solid-State Chemistry of Inorganic Materials V Editors: Jing Li, Nathaniel E. Brese, Mercouri G. Kanatzidis, Martin Jansen.
- Co-organizer. NSF sponsored workshop to review status and future of solid-state chemistry, June 2006.